

Stick Figure Data

By David K Butler, Maths Learning Centre, University of Adelaide

These 32 data cards are designed for statistical activities.

Print the cards 16 to a page and cut them out to create the set of 32 cards.

There are nine variables presented on the cards, not including names: four numerical variables (age, height, average heart rate, and average temperature) and five categorical variables (mood, headgear, pet type, bike ownership, and stance).

The data have been carefully designed so that some pairs of variables have a clear relationship and some do not.

The main activity the cards are designed for is to arrange the cards spatially in order to investigate and display the relationships between pairs of variables. An instruction sheet is shown on the next page. I recommend letting the students look at the data cards and discussing what they see, then talking through the instructions before showing them the instruction sheet.



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Stick Figure Data

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Each data card shows information about stick figure people, with nine variables shown on each card.

Choose one variable from each column below and circle them to complete the sentence.

(You can write your own variable as long as it can be figured out from what you see on the cards.)

How is	age	related to	age	?
	height		height	
	heart rate		heart rate	
	temperature		temperature	
	mood		mood	
	stance		stance	
	headgear		headgear	
	pet type		pet type	
	bike ownership		bike ownership	
	(write your own)		(write your own)	

Arrange the data cards on the table so that someone else can **see** how _____ is related to _____.

They have to be able to see the relationship from the way the cards are arranged without reading all the cards.

When you are happy with the arrangement, place this sheet next to the cards so that people know what to look for.

Then either investigate a new relationship with a fresh sheet and set of cards, or go to look at other people's card arrangements.



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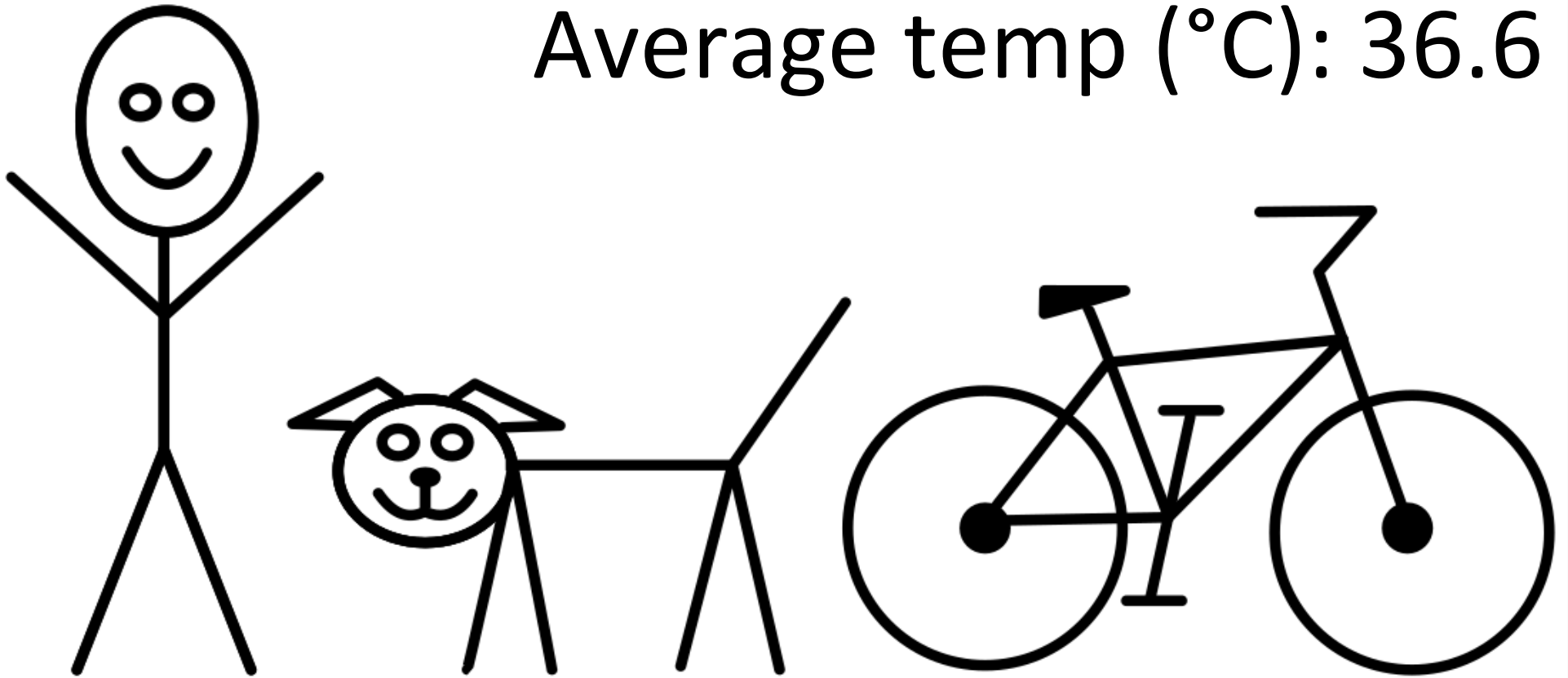
Kami

Age (years): 50

Height (cm): 170

Average heart rate (bpm): 62

Average temp ($^{\circ}\text{C}$): 36.6



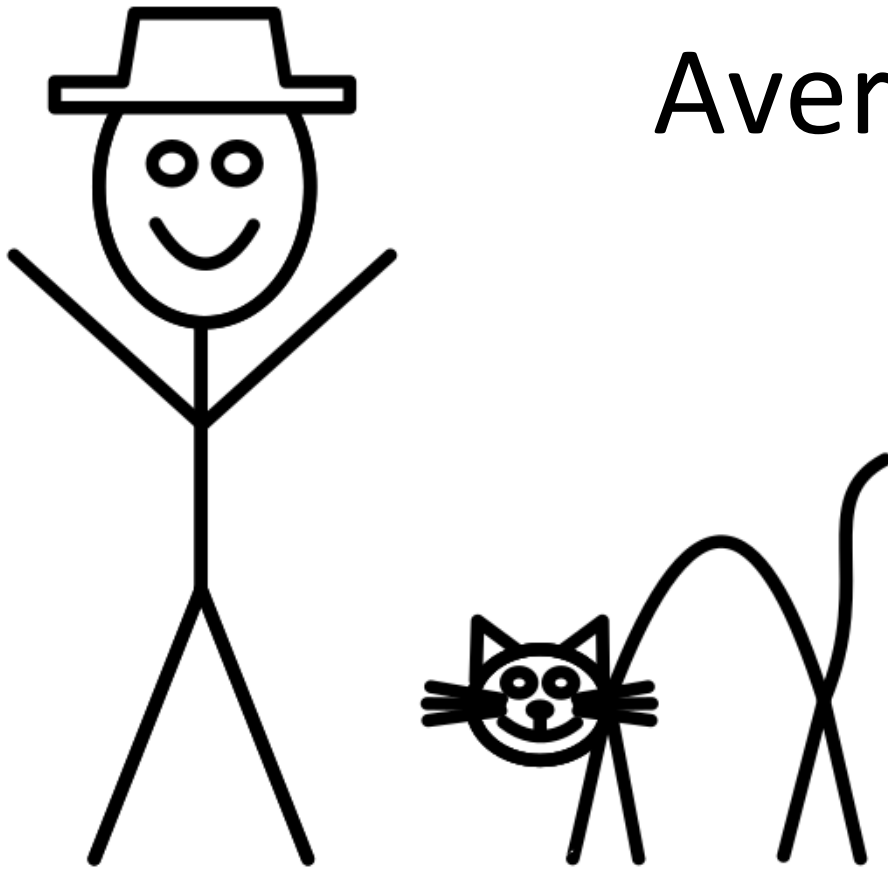
Lan

Age (years): 26

Height (cm): 173

Average heart rate (bpm): 75

Average temp ($^{\circ}\text{C}$): 36.9



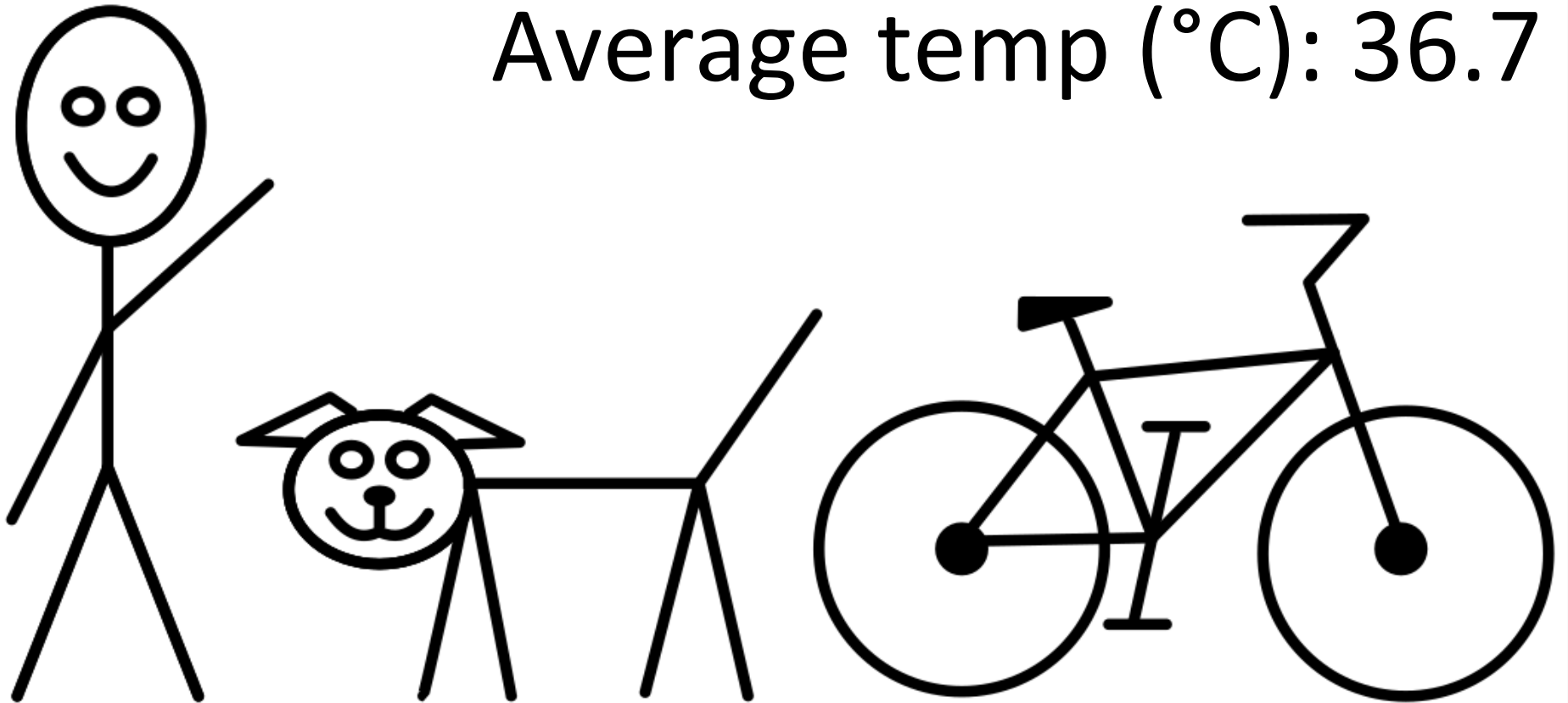
Shannon

Age (years): 38

Height (cm): 178

Average heart rate (bpm): 56

Average temp ($^{\circ}\text{C}$): 36.7



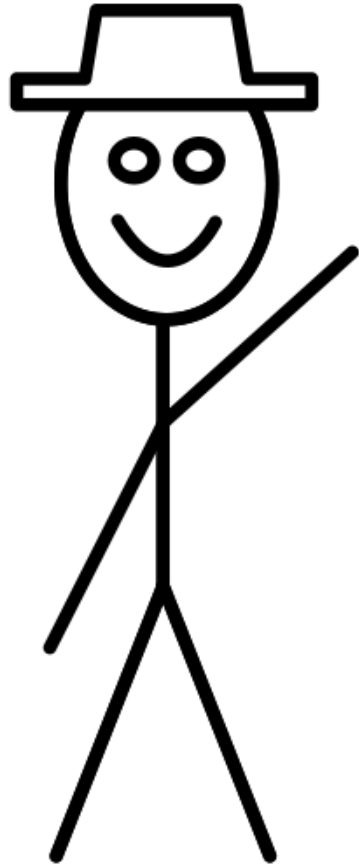
Darren

Age (years): 20

Height (cm): 165

Average heart rate (bpm): 100

Average temp ($^{\circ}\text{C}$): 37.3



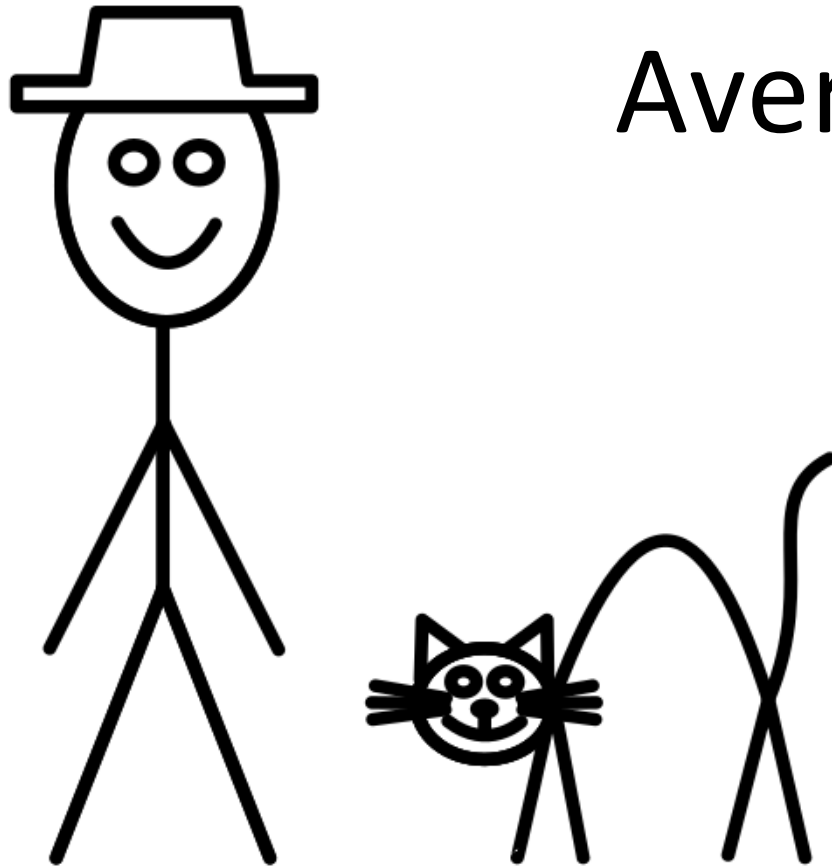
Brianna

Age (years): 26

Height (cm): 160

Average heart rate (bpm): 85

Average temp ($^{\circ}\text{C}$): 36.8



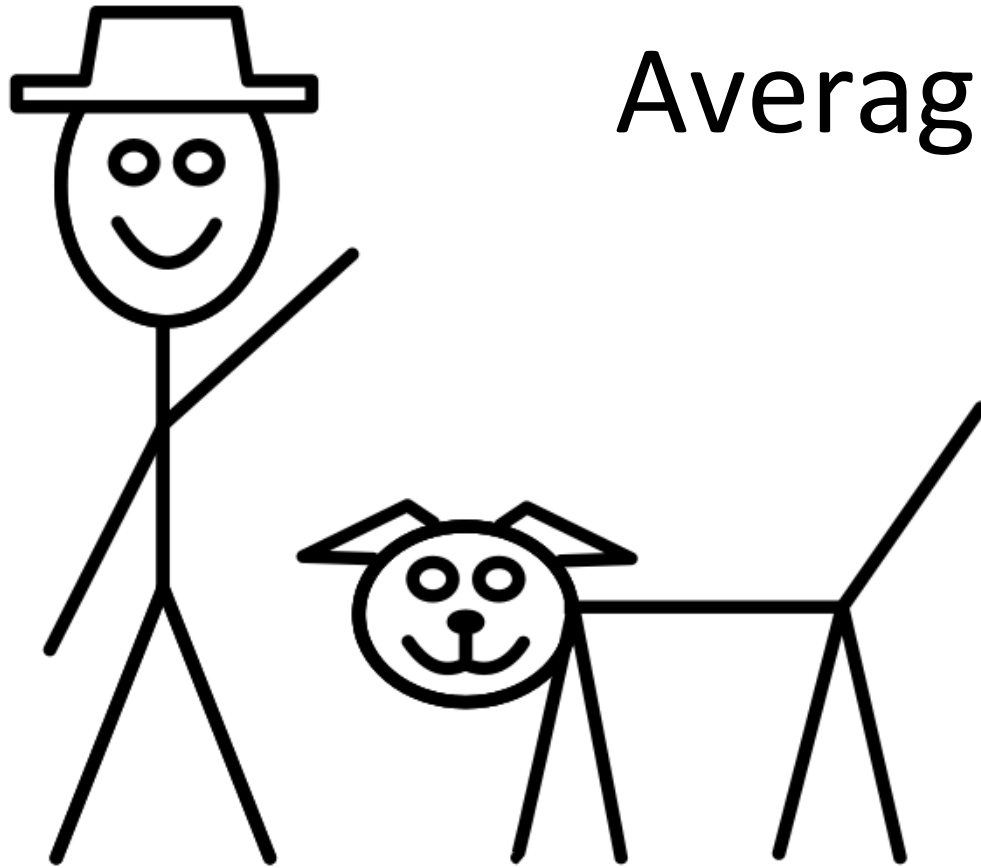
Taylor

Age (years): 26

Height (cm): 169

Average heart rate (bpm): 80

Average temp ($^{\circ}\text{C}$): 36.9



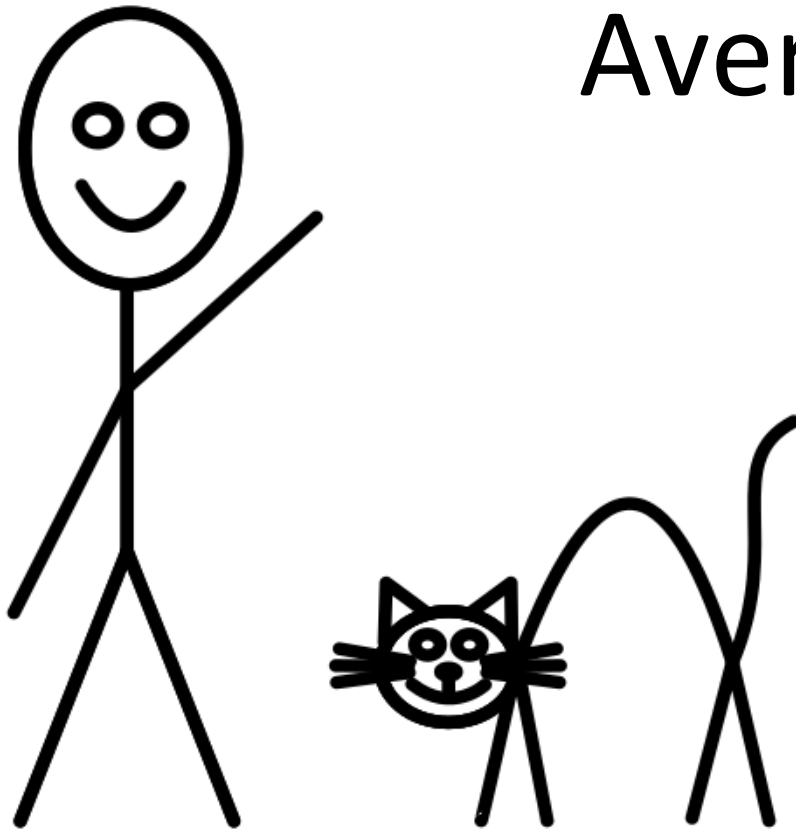
Prisha

Age (years): 22

Height (cm): 178

Average heart rate (bpm): 64

Average temp ($^{\circ}\text{C}$): 36.9



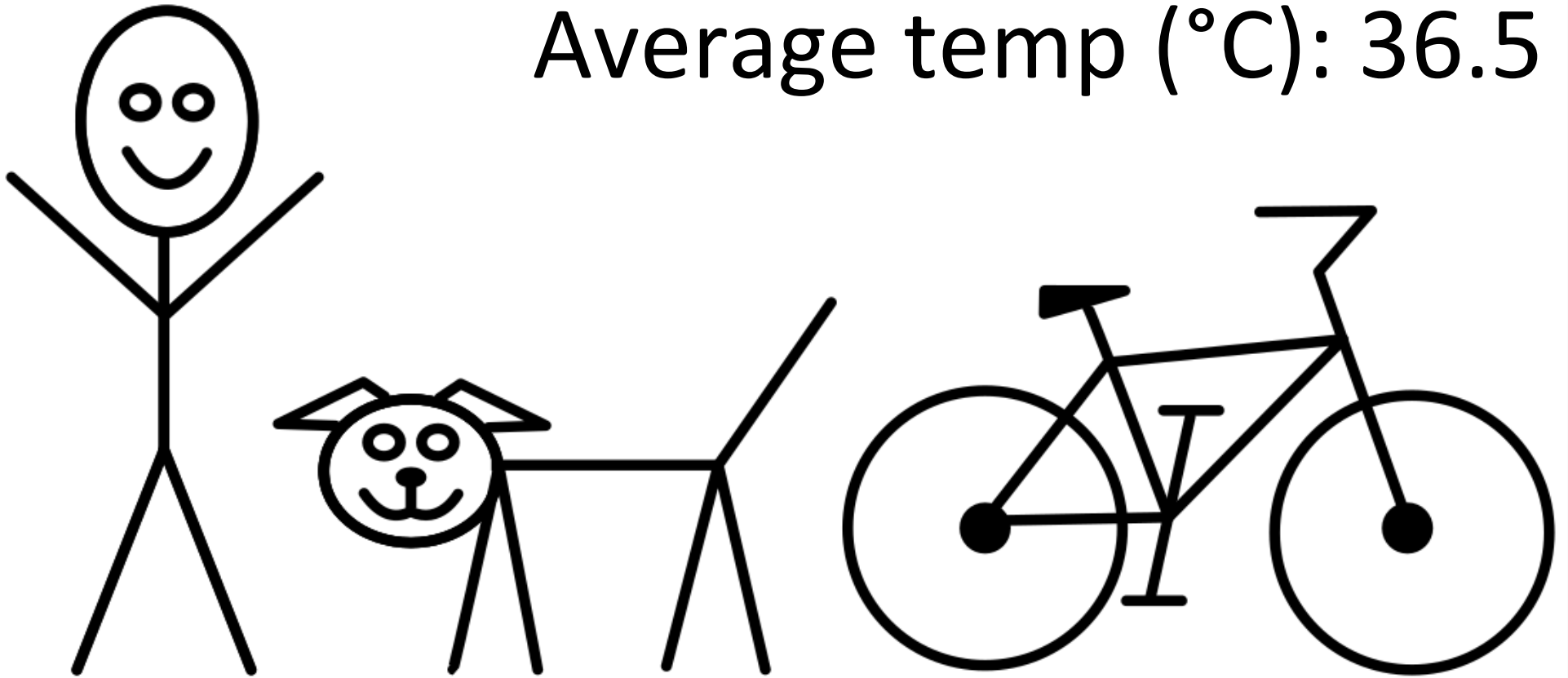
Travis

Age (years): 34

Height (cm): 157

Average heart rate (bpm): 79

Average temp ($^{\circ}\text{C}$): 36.5



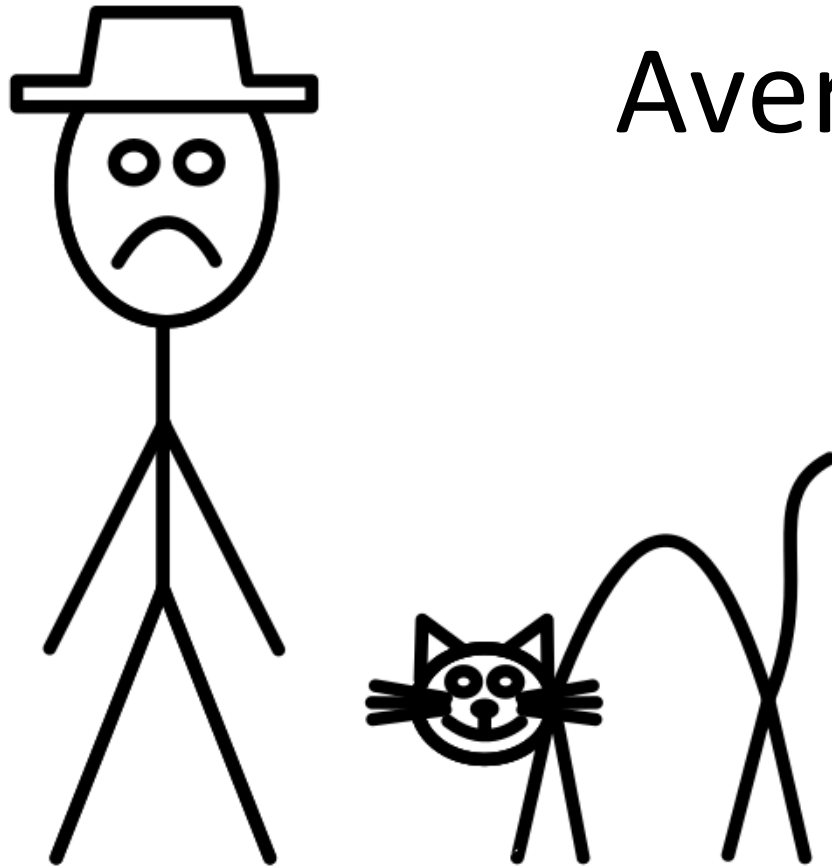
Bao

Age (years): 25

Height (cm): 162

Average heart rate (bpm): 81

Average temp ($^{\circ}\text{C}$): 36.9



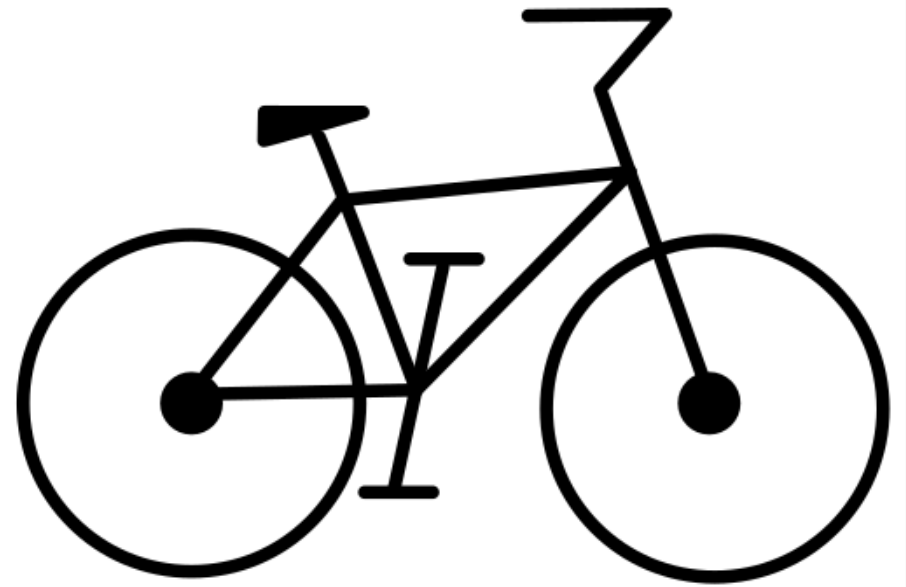
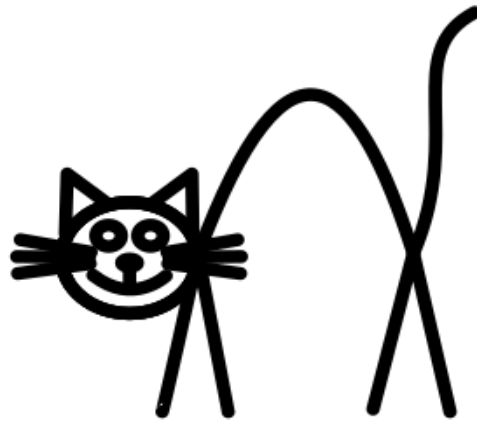
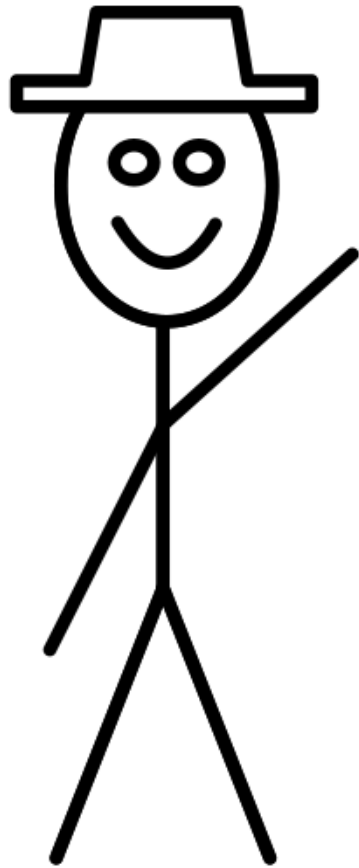
Zara

Age (years): 23

Height (cm): 171

Average heart rate (bpm): 68

Average temp ($^{\circ}\text{C}$): 37.2



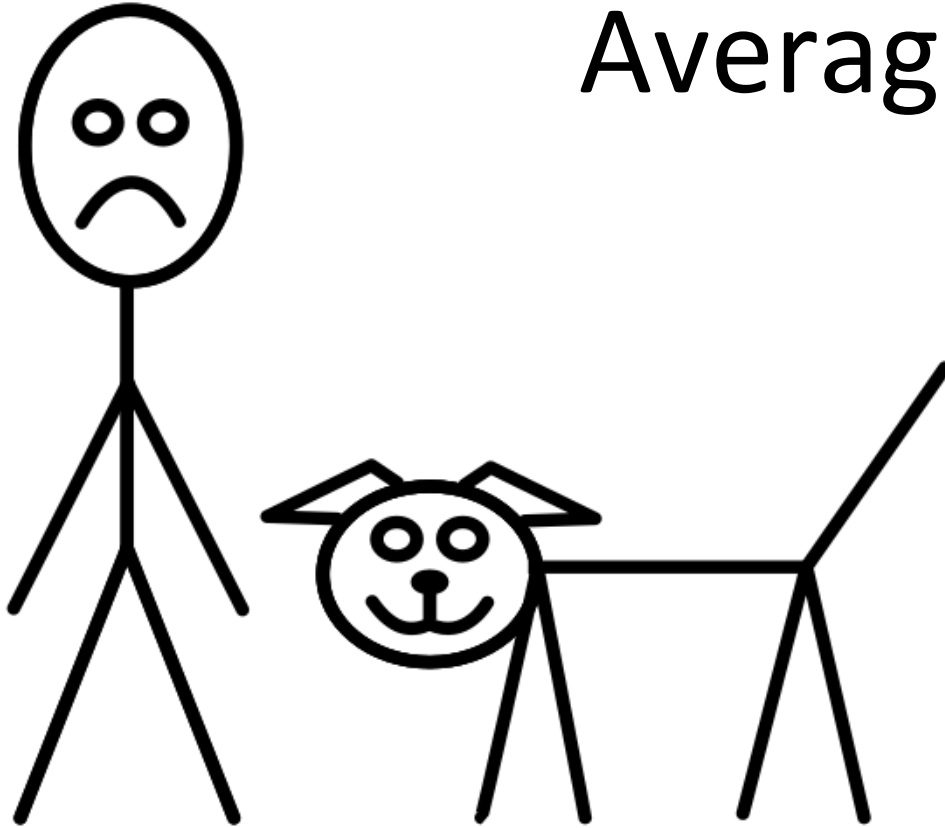
Rylan

Age (years): 23

Height (cm): 173

Average heart rate (bpm): 72

Average temp ($^{\circ}\text{C}$): 36.8



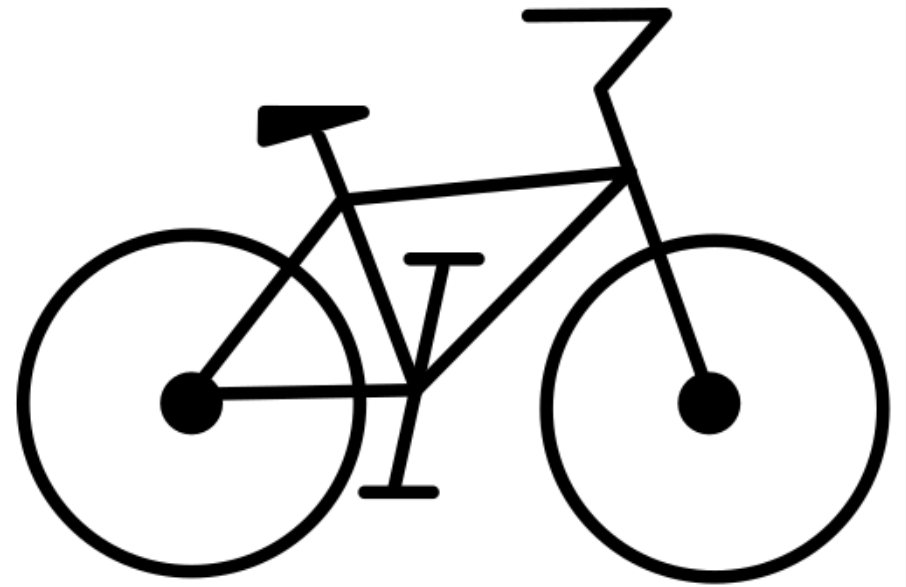
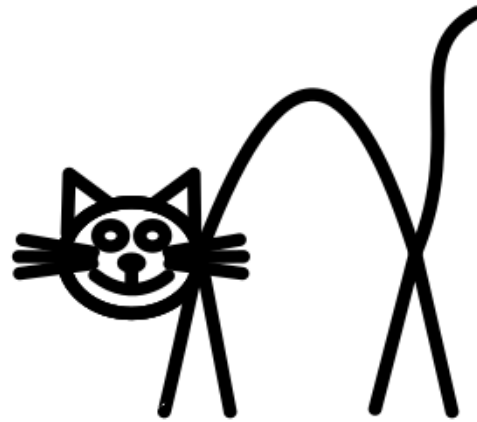
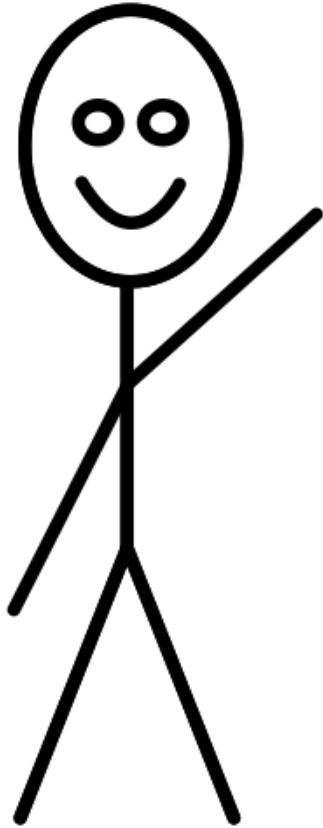
Mingmei

Age (years): 28

Height (cm): 170

Average heart rate (bpm): 65

Average temp ($^{\circ}\text{C}$): 37.0



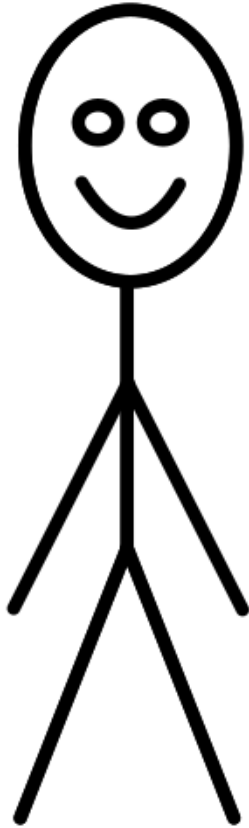
Muhammad

Age (years): 46

Height (cm): 167

Average heart rate (bpm): 95

Average temp ($^{\circ}\text{C}$): 36.8



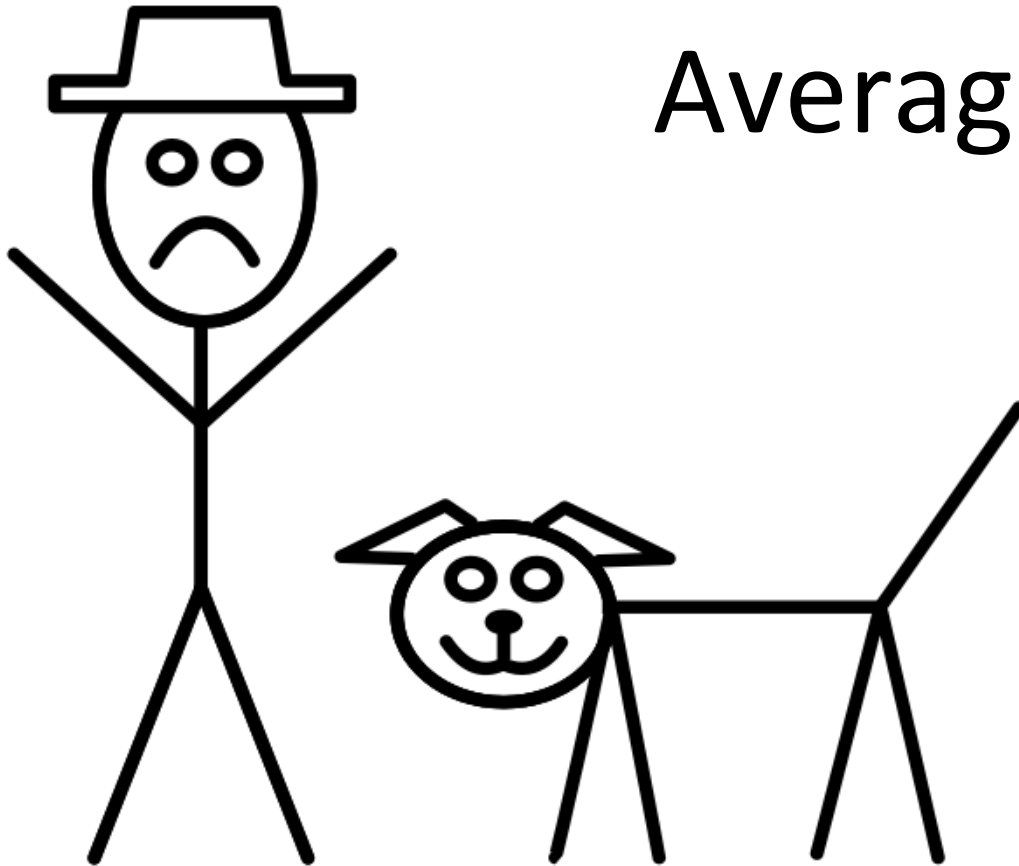
Molly

Age (years): 21

Height (cm): 177

Average heart rate (bpm): 73

Average temp (°C): 36.9



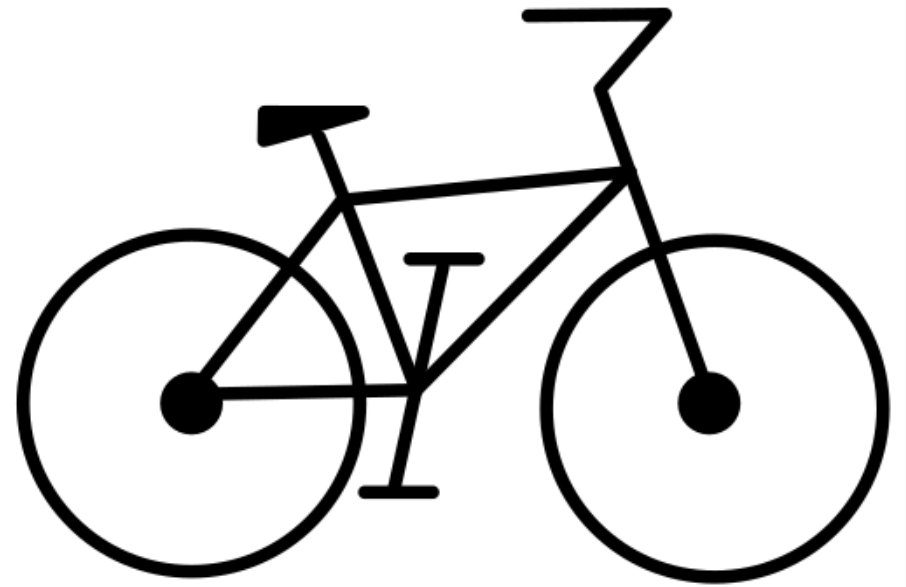
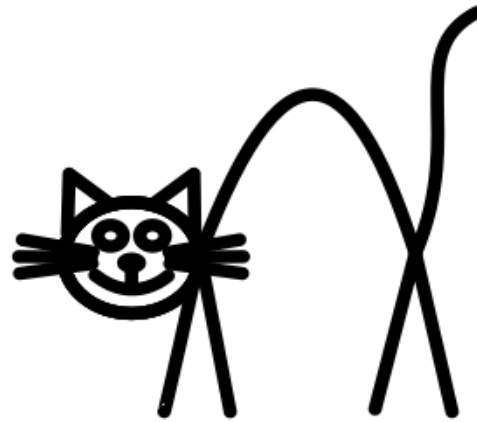
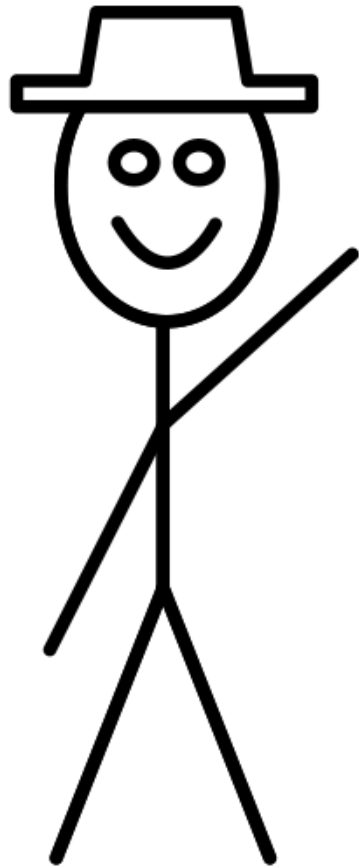
Alex

Age (years): 33

Height (cm): 167

Average heart rate (bpm): 73

Average temp ($^{\circ}\text{C}$): 37.1



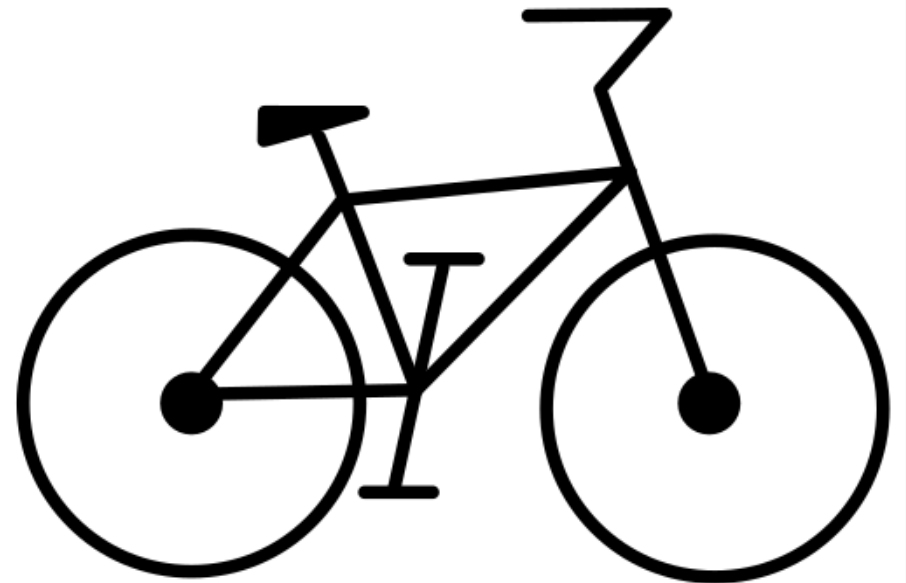
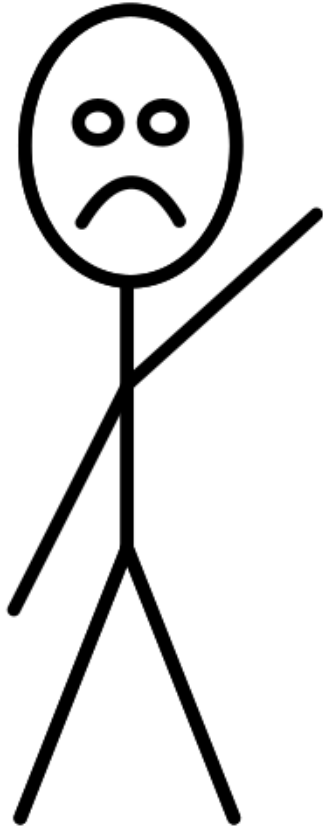
Leila

Age (years): 39

Height (cm): 172

Average heart rate (bpm): 73

Average temp ($^{\circ}\text{C}$): 36.7



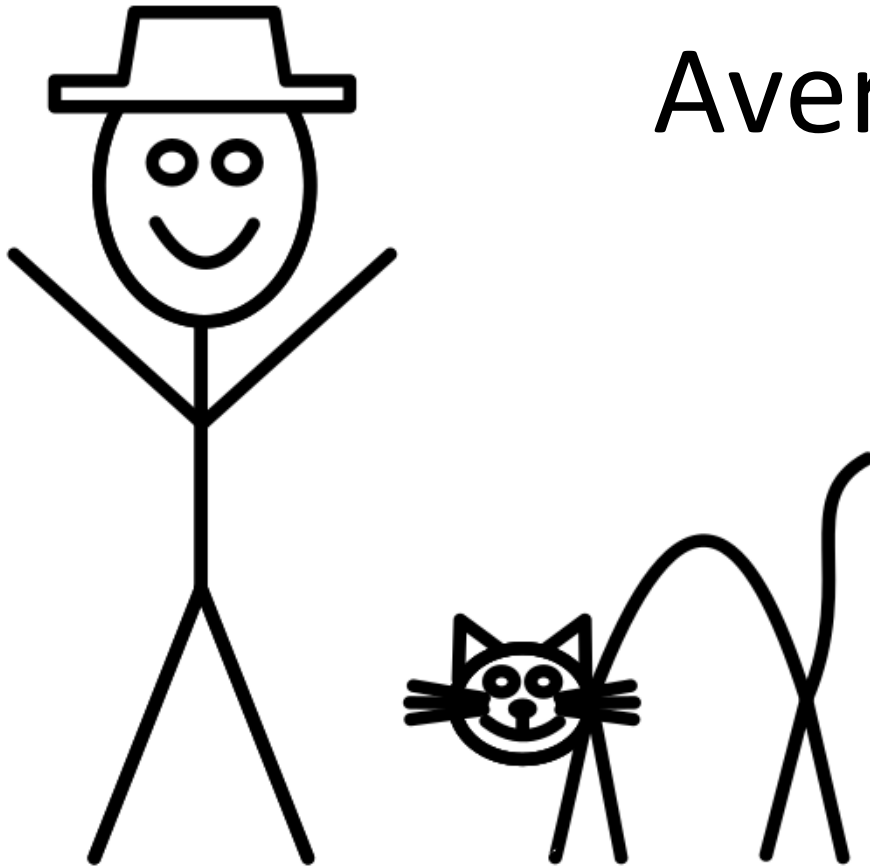
Dakota

Age (years): 18

Height (cm): 163

Average heart rate (bpm): 86

Average temp ($^{\circ}\text{C}$): 36.9



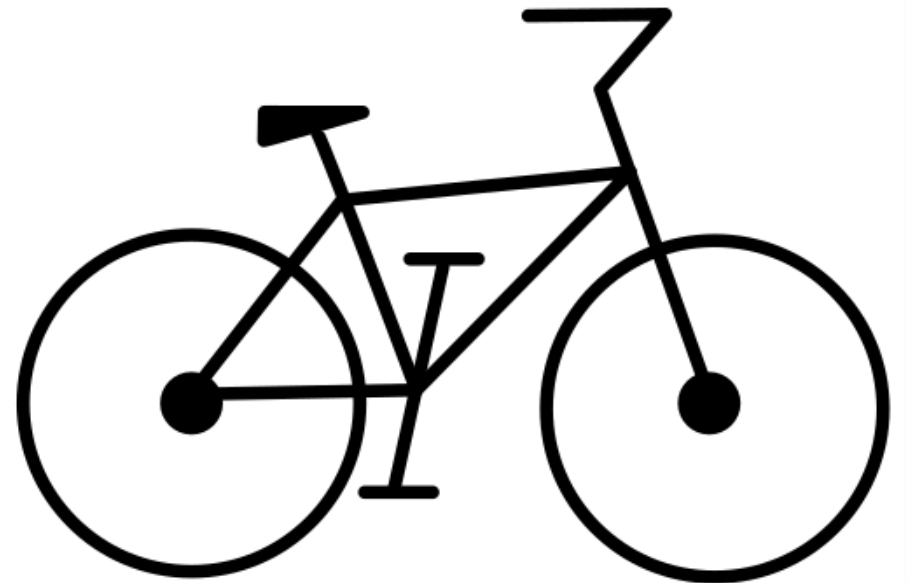
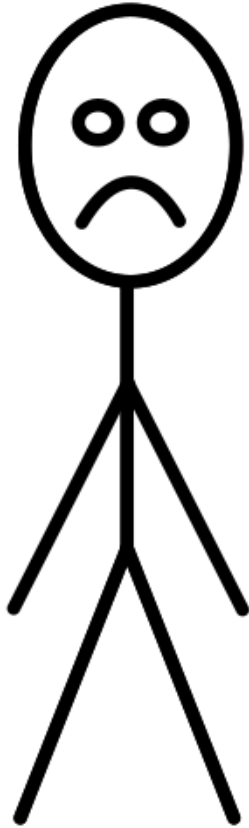
Sai

Age (years): 30

Height (cm): 169

Average heart rate (bpm): 79

Average temp ($^{\circ}\text{C}$): 36.8



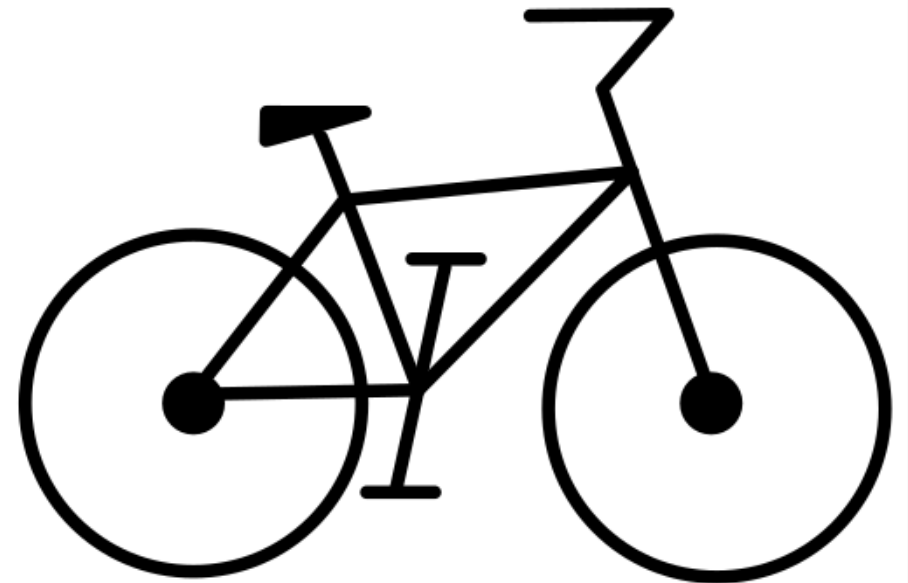
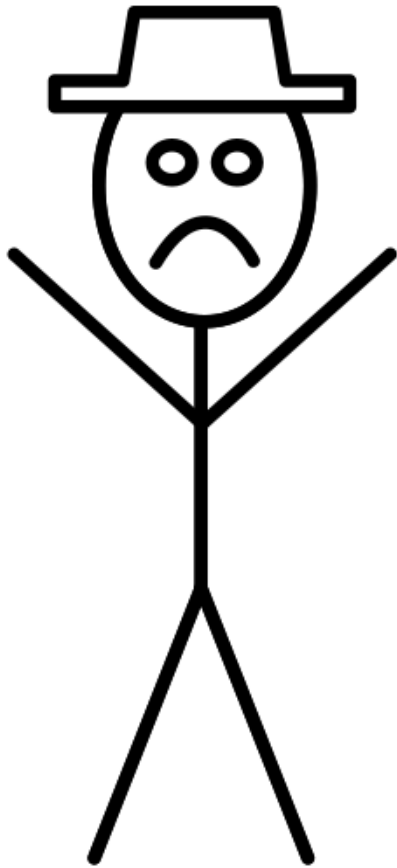
Jordan

Age (years): 19

Height (cm): 175

Average heart rate (bpm): 77

Average temp ($^{\circ}\text{C}$): 37.3



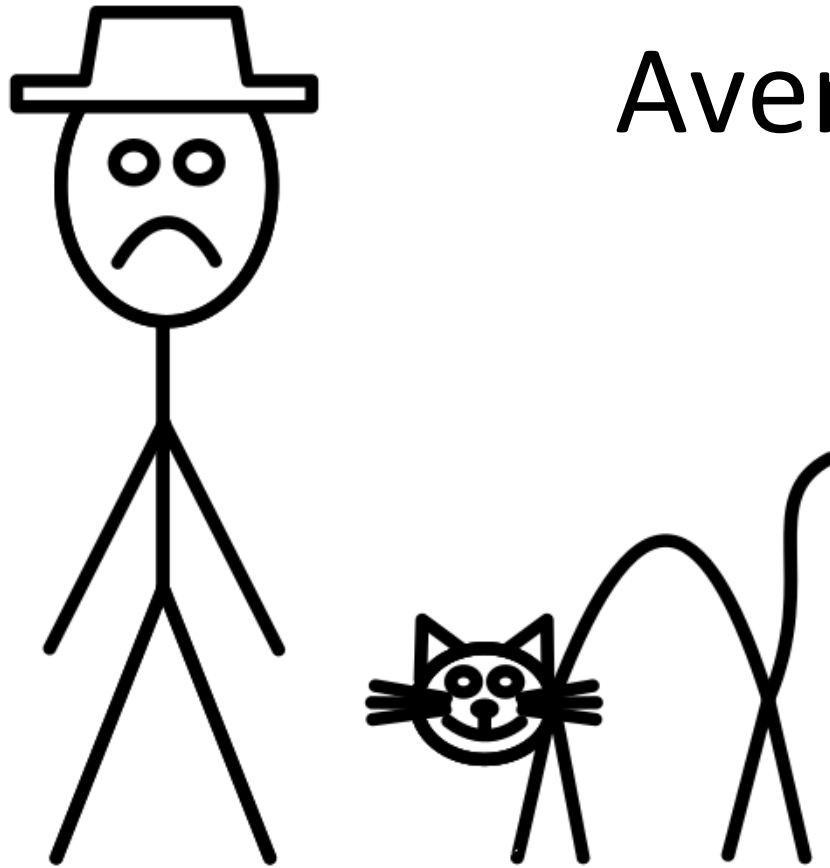
Sydney

Age (years): 31

Height (cm): 179

Average heart rate (bpm): 63

Average temp ($^{\circ}\text{C}$): 36.7



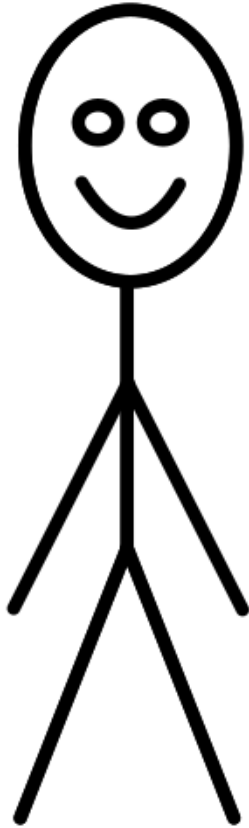
Charlie

Age (years): 29

Height (cm): 169

Average heart rate (bpm): 89

Average temp ($^{\circ}\text{C}$): 36.6



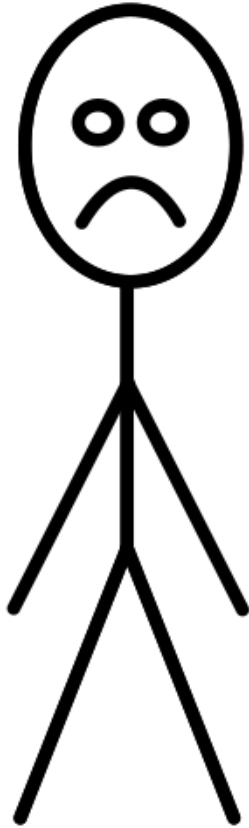
Sasha

Age (years): 26

Height (cm): 174

Average heart rate (bpm): 85

Average temp ($^{\circ}\text{C}$): 36.7



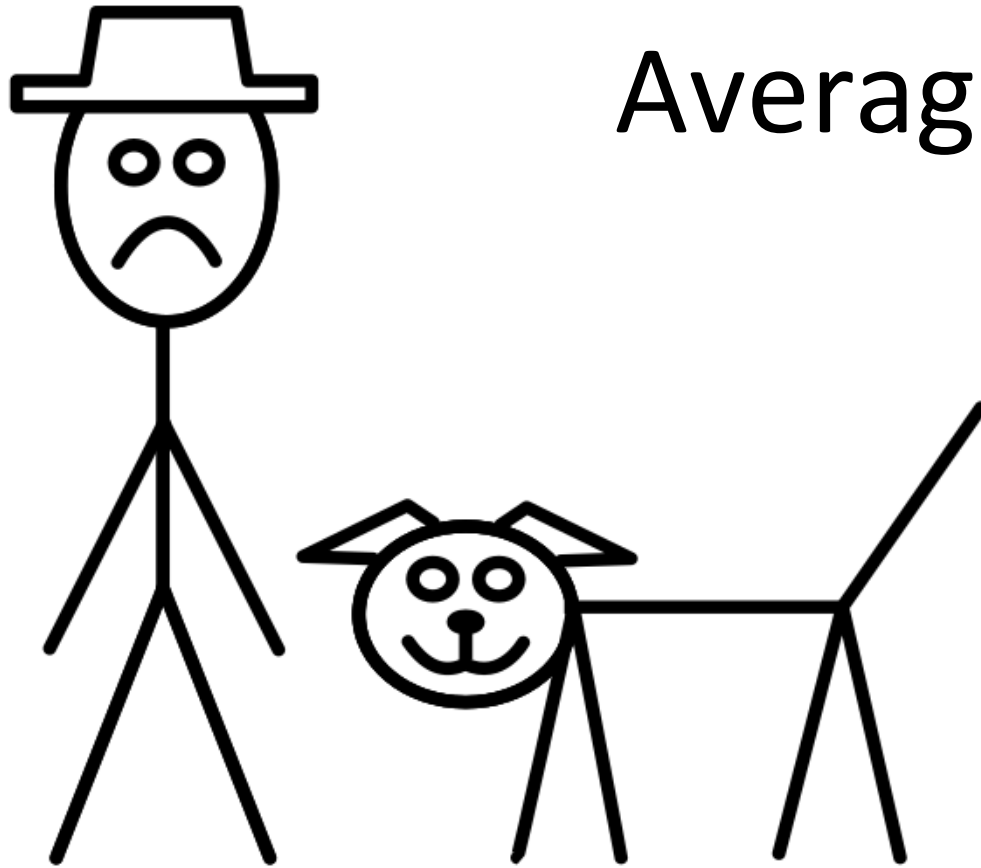
Phoenix

Age (years): 19

Height (cm): 162

Average heart rate (bpm): 92

Average temp ($^{\circ}\text{C}$): 37.0



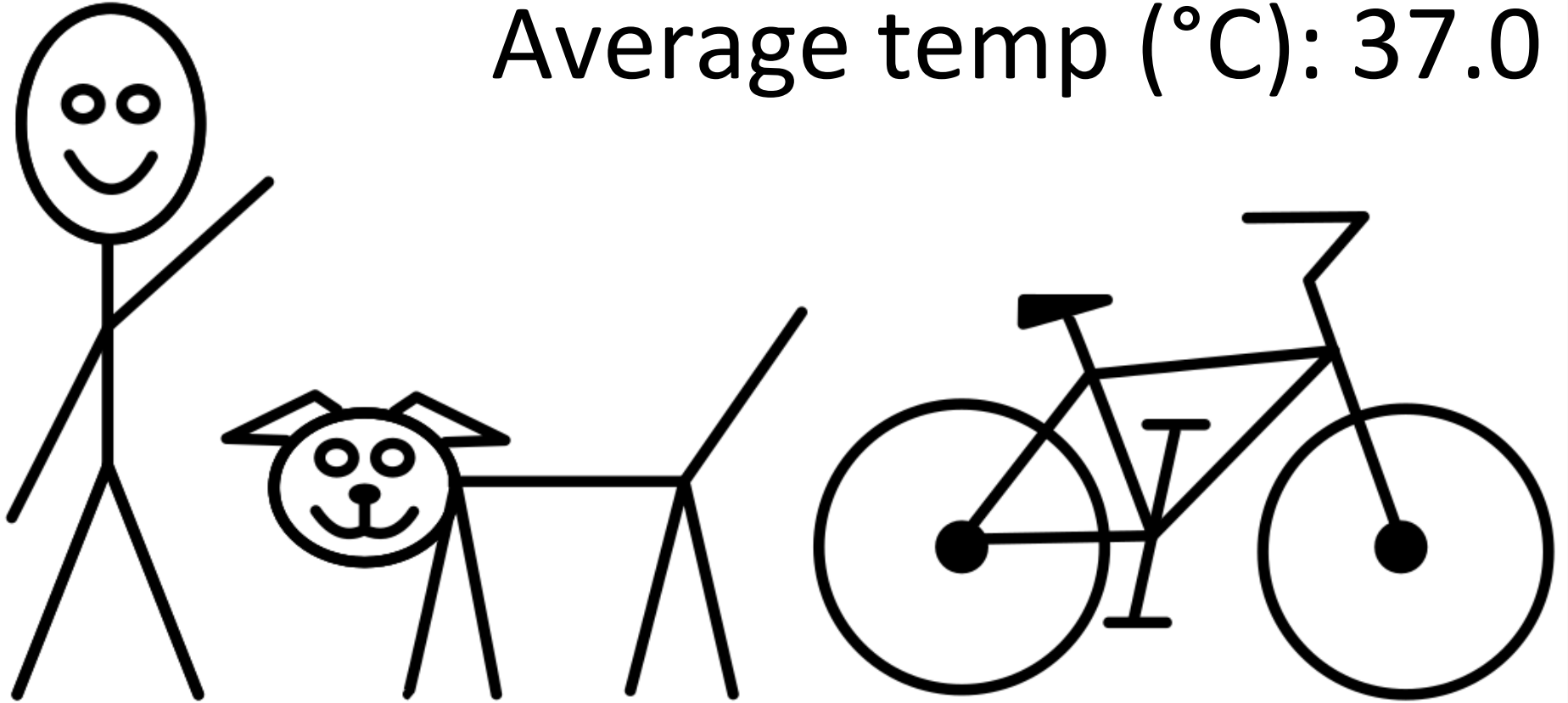
Zhang

Age (years): 43

Height (cm): 165

Average heart rate (bpm): 74

Average temp ($^{\circ}\text{C}$): 37.0



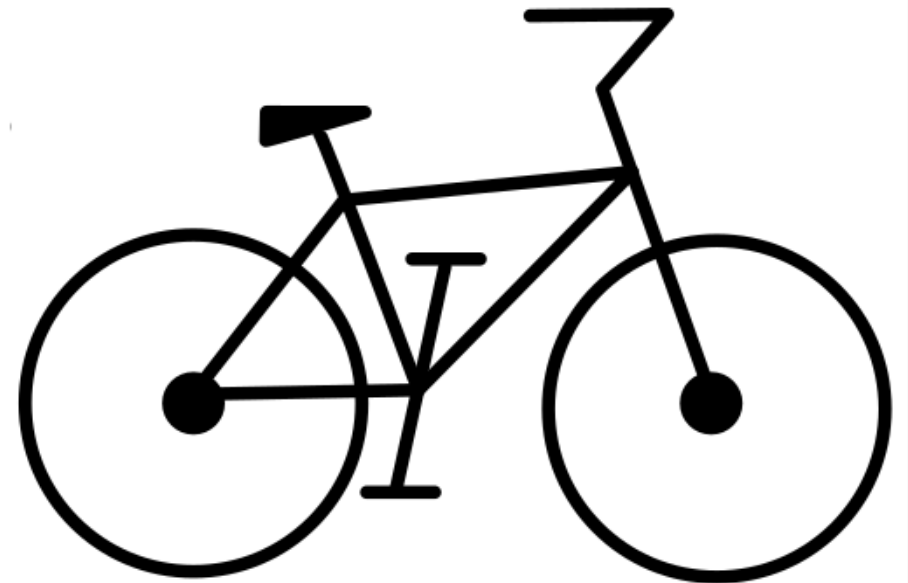
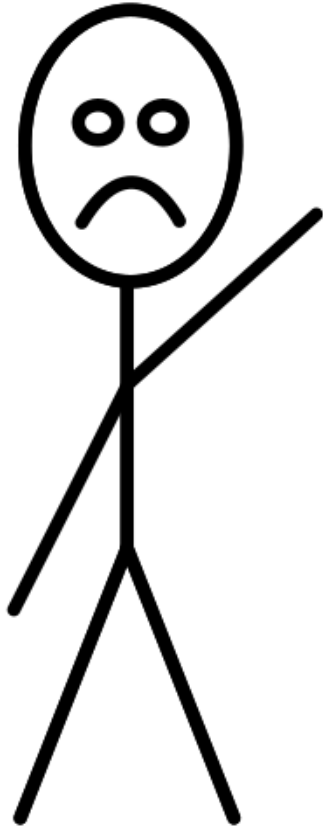
Sarah

Age (years): 49

Height (cm): 172

Average heart rate (bpm): 68

Average temp ($^{\circ}\text{C}$): 36.4



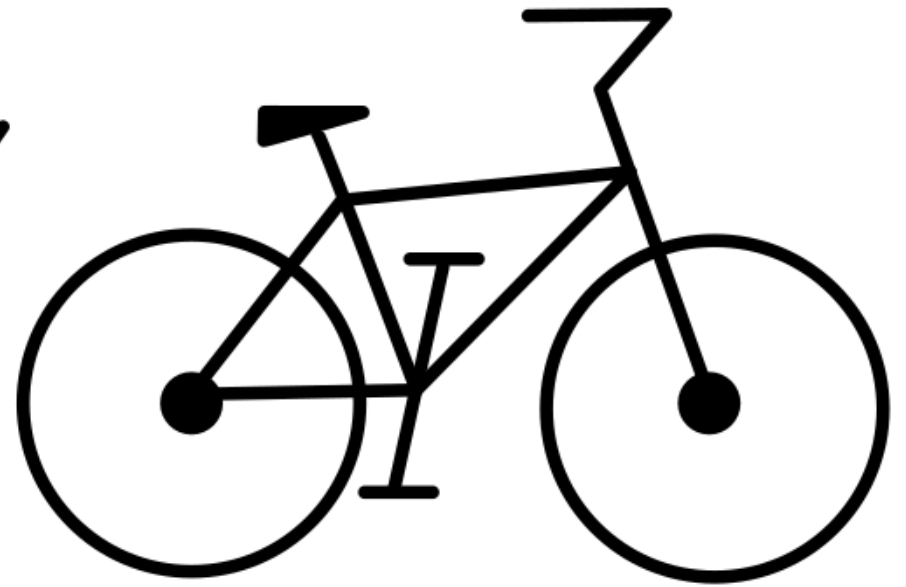
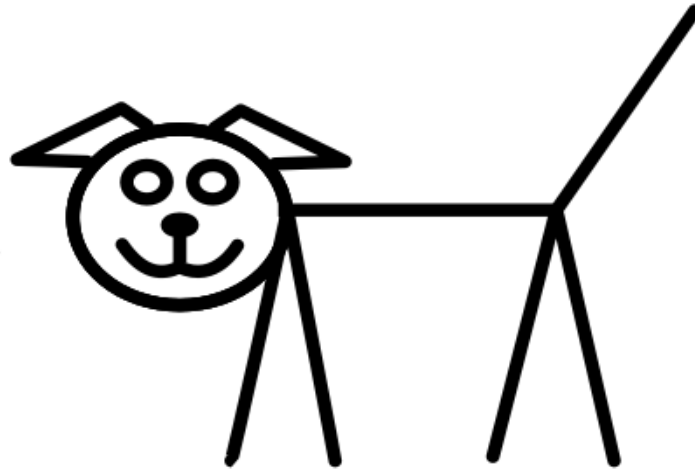
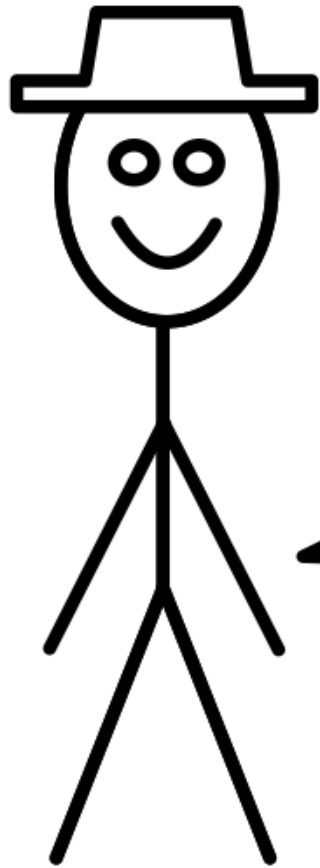
Joseph

Age (years): 26

Height (cm): 167

Average heart rate (bpm): 65

Average temp ($^{\circ}\text{C}$): 37.0



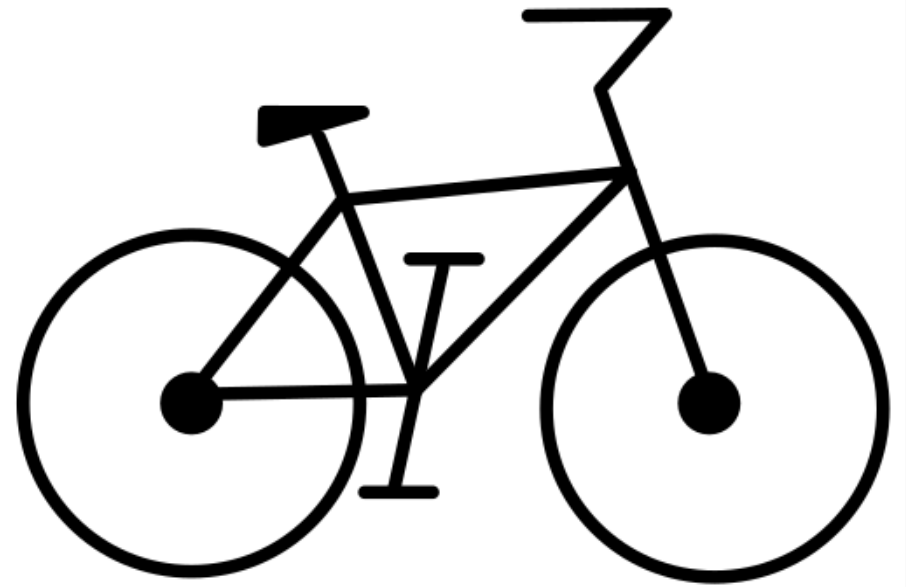
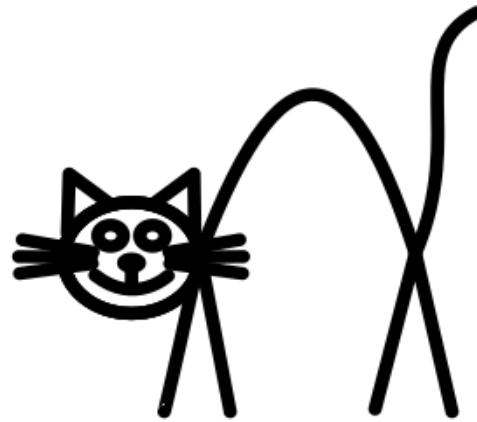
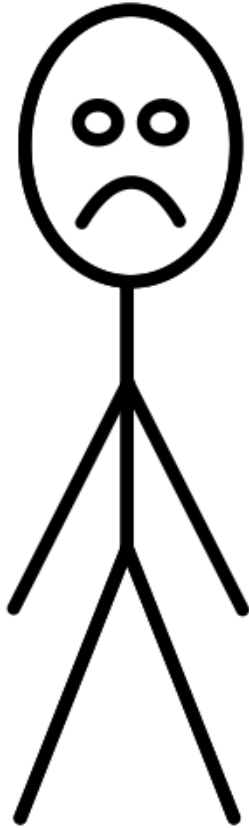
Quinn

Age (years): 30

Height (cm): 171

Average heart rate (bpm): 67

Average temp ($^{\circ}\text{C}$): 37.0



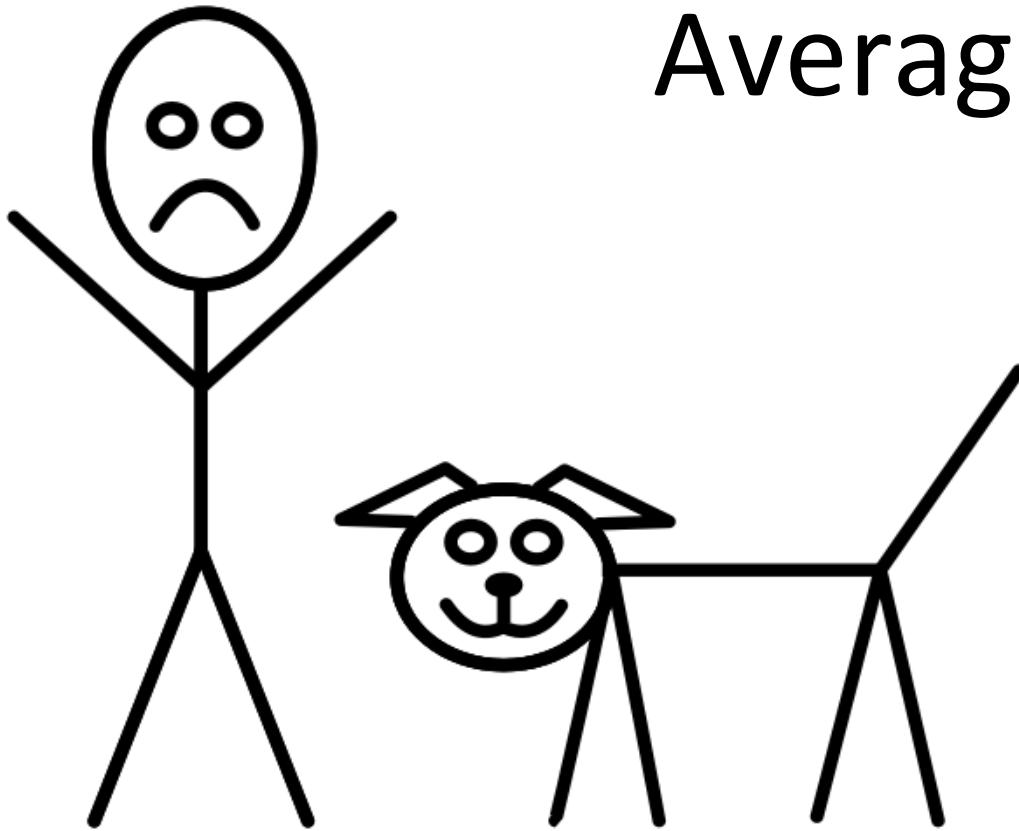
Afrina

Age (years): 21

Height (cm): 172

Average heart rate (bpm): 83

Average temp ($^{\circ}\text{C}$): 37.2



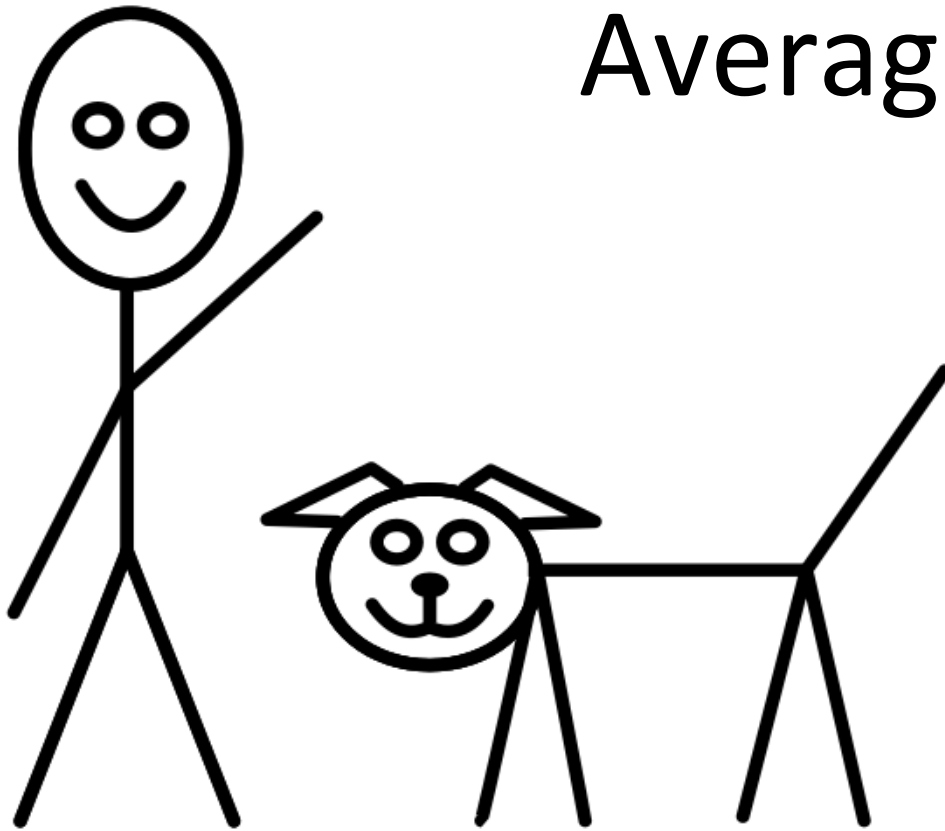
Casey

Age (years): 32

Height (cm): 181

Average heart rate (bpm): 71

Average temp ($^{\circ}\text{C}$): 36.9



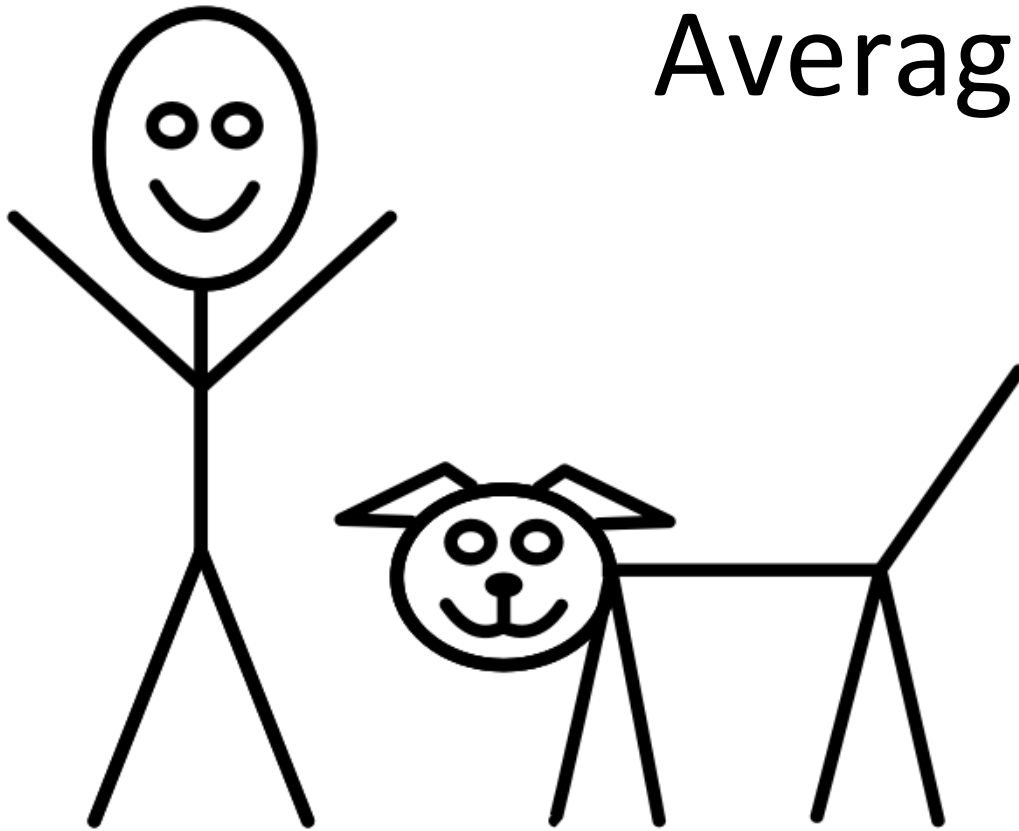
Olivia

Age (years): 29

Height (cm): 171

Average heart rate (bpm): 76

Average temp ($^{\circ}\text{C}$): 36.7



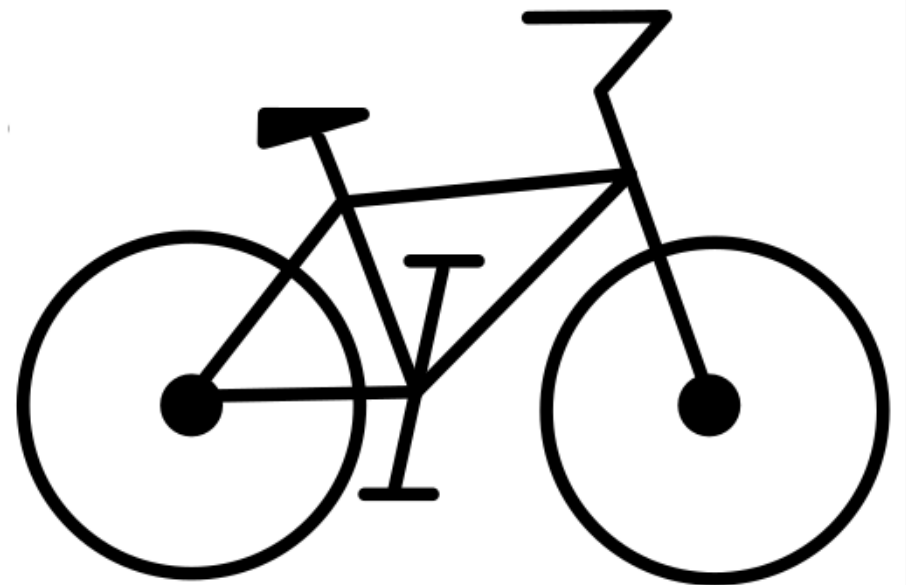
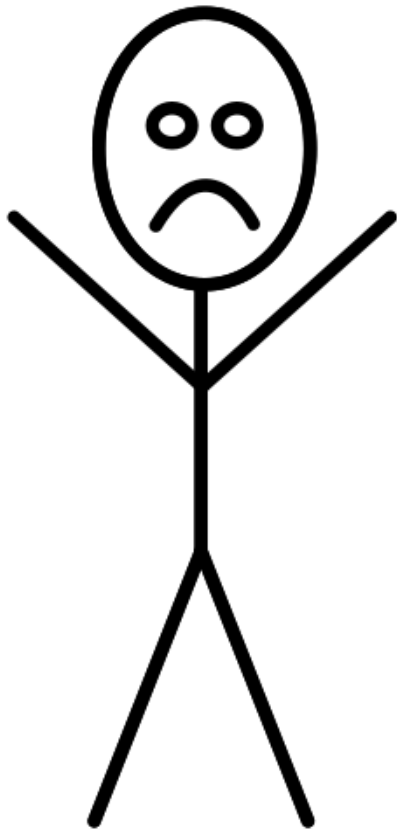
Matthew

Age (years): 23

Height (cm): 167

Average heart rate (bpm): 81

Average temp ($^{\circ}\text{C}$): 36.7



River

Age (years): 26

Height (cm): 167

Average heart rate (bpm): 84

Average temp ($^{\circ}\text{C}$): 36.8

